

Chapter 4 Review

Vocabulary Review

base (p. 162)

common factor (p. 171)

common multiple (p. 188)

composite number (p. 166)

divisible (p. 158)

equivalent fractions (p. 176)

even number (p. 159)

exponent (p. 162)

factor (p. 166)

greatest common factor (GCF)
(p. 171)

improper fraction (p. 182)

least common denominator
(LCD) (p. 192)

least common multiple (LCM)
(p. 188)

mixed number (p. 182)

multiple (p. 188)

odd number (p. 159)

power (p. 162)

prime factorization (p. 167)

prime number (p. 166)

proper fraction (p. 182)

repeating decimal (p. 198)

simplest form (p. 177)

terminating decimal (p. 198)

Choose the correct vocabulary term to complete each sentence.

1. Fractions that represent the same amount are ? .

2. The number $5\frac{1}{8}$ is a(n) ? .

3. The ? of 42 is $2 \times 3 \times 7$.

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Skills and Concepts

Lesson 4-1

- To check for divisibility using mental math and to use divisibility to solve problems

You can use divisibility rules to solve problems.

Test each number for divisibility by 2, 3, 5, 9, and 10.

4. 207

5. 585

6. 756

7. 3,330

Lessons 4-2 and 4-3

- To use exponents and to simplify expressions with exponents
- To factor numbers and to find the prime factorization of numbers

You can use an **exponent** to show how many times a number, or **base**, is used as a factor. A number expressed using an exponent is called a **power**.

Simplify each expression.

8. $3^2 + 2^3$

9. $(15 - 1) - 3^2$

A **prime number** has exactly two factors, 1 and the number itself. A **composite number** has more than two factors. Writing a composite number as a product of prime numbers gives the **prime factorization** of the number.

Find the prime factorization of each number.

10. 28

11. 51

12. 100

13. 250

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base (p. 162)	factor (p. 166)	multiple (p. 188)
common factor (p. 171)	greatest common factor (GCF) (p. 171)	odd number (p. 159)
common multiple (p. 188)	improper fraction (p. 182)	power (p. 162)
composite number (p. 166)	least common denominator (LCD) (p. 192)	prime factorization (p. 167)
divisible (p. 158)	least common multiple (LCM) (p. 188)	prime number (p. 166)
equivalent fractions (p. 176)	mixed number (p. 182)	proper fraction (p. 182)
even number (p. 159)		repeating decimal (p. 198)
exponent (p. 162)		simplest form (p. 177)
		terminating decimal (p. 198)

Choose the correct vocabulary term to complete each sentence.

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- The number $5\frac{1}{8}$ is a(n) ? .
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- 51
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Lesson 4-4

- To find the GCF of two or more numbers

The **greatest common factor (GCF)** of two or more numbers is the greatest factor shared by all the numbers.

Find the GCF of each set of numbers.

- 18, 28
- 12, 62
- 25, 35
- 16, 40

Lessons 4-5 and 4-6

- To find equivalent forms of fractions
- To use mixed numbers and improper fractions

Equivalent fractions are fractions that name the same amount. A fraction is in **simplest form** when the only common factor of the numerator and the denominator is 1. A **mixed number** shows the sum of a whole number and a fraction. An **improper fraction** has a numerator that is greater than or equal to its denominator.

State whether each fraction is in simplest form. If the fraction is not, write the fraction in simplest form. Then write three other equivalent fractions for each fraction.

- $\frac{5}{20}$
- $\frac{4}{6}$
- $\frac{1}{3}$
- $\frac{2}{9}$

Rewrite each number as an improper fraction or a mixed number.

- $4\frac{2}{3}$
- $8\frac{1}{5}$
- $\frac{13}{3}$
- $\frac{58}{6}$

Lesson 4-7

- To find the LCM of two or more numbers

A number that is a multiple of each of two or more numbers is a **common multiple**. The **least common multiple (LCM)** of two or more numbers is the least multiple that is common to all the numbers.

Find the LCM of each set of numbers.

- 12, 22
- 10, 20, 35

Lessons 4-8, 4-9

- To compare and order fractions
- To find equivalent forms of fractions and decimals and to order fractions and decimals

To compare fractions with unlike denominators, find equivalent fractions that have a common denominator. To write a fraction as a decimal, divide the numerator by the denominator. Write a fraction for a decimal just as you would say the decimal.

Order the numbers from least to greatest.

- $\frac{1}{2}, \frac{1}{4}, \frac{1}{6}$
- $2\frac{4}{15}, 2\frac{1}{3}, 2\frac{2}{5}$
- $\frac{17}{40}, \frac{7}{20}, \frac{5}{16}$

Write each number as a fraction or mixed number in simplest form or as a decimal.

- $\frac{3}{16}$
- $6\frac{5}{24}$
- 0.06
- 4.52